UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,604	12/08/2003	Srikanth Karimisetty	021756-002100US	4746

51206   7590   02/13/2009
TOWNSEND AND TOWNSEND AND CREW LLP
TWO EMBARCADERO CENTER
8TH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER
MORRISON, JAY A

ART UNIT	PAPER NUMBER
2168	

MAIL DATE	DELIVERY MODE
02/13/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/731,604	KARIMISETTY ET AL.
	Examiner	Art Unit
	JAY A. MORRISON	2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-12,14-17,19 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-12,14-17,19 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some *   c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   Claims 1-3, 5-12, 14-17 and 19-20 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

    1.   Determining the scope and contents of the prior art.
    2.   Ascertaining the differences between the prior art and the claims at issue.
    3.   Resolving the level of ordinary skill in the pertinent art.
    4.   Considering objective evidence present in the application indicating
            obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 1-3, 5, 11-12, 14, 16-17 and 19 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Bertino et al. ('Bertino' hereinafter) ("Integrating XML and

Databases", IEEE Internet Computing, July-August 2001, pages 84-88) in view of Pal et

al. ('Pal' hereinafter) (Publication Number 2005/0091188) and further in view of

Adelberg (B. Adelberg, "NoDoSE--a tool for semi-automatically extracting

semistructured data from text documents", in: Proceedings of 1998 ACM SIGMOD

International Conference on Management of Data, Seattle, Washington, USA, 1998, pp.

283-294).

       As per claim 1, Bertino teaches

       A method of searching unstructured data stored in a database, the method

comprising: (see page 84, first column, paragraphs 1-2)

       storing unstructured data in a column of a database table in character large

object (CLOB) format; (document stored in database in Clob, page 86, first column, third

paragraph)

unstructured data , stored in CLOB format as query elements, and obtaining

information from the unstructured data stored in CLOB format for the corresponding

element. (query unstructured documents, page 86, second column, second paragraph)

Bertino does not explicitly indicate "generating a plurality of database tables

representing an intermediate index between each query element and at least one of the

one or more elements identified as query elements in the unstructured data stored in

CLOB format; generating one or more queries on the unstructured data stored in CLOB

format using the query elements; translating a query element associated with a query

on the unstructured data based on the plurality of tables to a corresponding element in

the unstructured data stored in CLOB format".

However, Pal discloses "generating a plurality of database tables representing an

intermediate index between each query element and at least one of the one or more

elements identified as query elements in the unstructured data stored in CLOB format;"

(create secondary XML indexes, paragraph [0048], lines 1-4; paragraph [0050], lines 1-

6) "generating one or more queries on the unstructured data stored in CLOB format

using the query elements; translating a query element associated with a query on the

unstructured data based on the plurality of tables to a corresponding element in the

unstructured data stored in CLOB format" (queries using secondary index path,

paragraph [0051], lines 3-10).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bertino and Pal because using the steps of "generating

a plurality of database tables representing an intermediate index between each query

element and at least one of the one or more elements identified as query elements in

the unstructured data stored in CLOB format; generating one or more queries on the

unstructured data stored in CLOB format using the query elements; translating a query

element associated with a query on the unstructured data based on the plurality of

tables to a corresponding element in the unstructured data stored in CLOB format"

would have given those skilled in the art the tools to improve the invention by allowing

fast and efficient searching of large objects in XML coded information. This gives the

user the advantage of more efficient use of limited resources.

Neither Bertino nor Pal generating a first graphical user interface and displaying

the first graphical user interface on a display device, the first graphical user interface

configured to enable users to designate elements in the data as query elements;

receiving user input via the first graphical user interface identifying one or more

elements in the data..

However, Adelberg discloses generating a first graphical user interface and

displaying the first graphical user interface on a display device, the first graphical user

interface configured to enable users to designate elements in the unstructured data as

query elements (gui which allows the user to hierarchically decompose the document,

page 5, section 202, first paragraph); receiving user input via the first graphical user

interface identifying one or more elements in the data (decompose document using gui,

page 5, section 202, first paragraph).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bertino, Pal and Adelberg because using the steps of

generating a first graphical user interface and displaying the first graphical user

interface on a display device, the first graphical user interface configured to enable

users to designate elements in the unstructured data as query elements; receiving user

input via the first graphical user interface identifying one or more elements in the data

would have given those skilled in the art the tools to improve the invention by bringing

new data such as mail, code, documentation and other text within the reach of general

query tools. This gives the user the advantage of being able to perform searches and

indexing on data items which are not normally searchable.

As per claim 2, Bertino teaches

the one or more queries specify at least one value and an operation that is to be

performed on a user-identified element in the unstructured data. (page 85, first column,

second paragraph)

As per claim 3, Bertino teaches

the one or more queries further include a start date and an end date. (query,

page 86, first column, second paragraph; dates included in XML data, figure 1)

As per claim 5, Bertino teaches

the unstructured data comprises a well-formed XML document stored within a

column of a database table. (page 86, first column, second paragraph)

As per claims 11-12 and 14,

These claims are rejected on grounds corresponding to the arguments given

above for rejected claims 1-2 and 5 and are similarly rejected.

As per claims 16-17 and 19,

These claims are rejected on grounds corresponding to the arguments given

above for rejected claims 1-2 and 5 and are similarly rejected.

4.   Claims 6-7, 15 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bertino et al. ('Bertino' hereinafter) ("Integrating XML and

Databases", IEEE Internet Computing, July-August 2001, pages 84-88) in view of Pal et

al. ('Pal' hereinafter) (Publication Number 2005/0091188) and further in view of

Adelberg (B. Adelberg, "NoDoSE--a tool for semi-automatically extracting

semistructured data from text documents", in: Proceedings of 1998 ACM SIGMOD

International Conference on Management of Data, Seattle, Washington, USA, 1998, pp.

283-294) and further in view of Arora et al. ('Arora' hereinafter) (Patent Number

7,346,598).

As per claim 6,

Nether Bertino, Pal nor Adelberg explicitly indicate "XML fields of the

unstructured data are filled with transaction data intercepted from a database

transaction prior to committing the transaction based on a predefined mapping to multiple data sources".

However, Arora discloses "XML fields of the unstructured data are filled with transaction data intercepted from a database transaction prior to committing the transaction based on a predefined mapping to multiple data sources" (column 7, lines 22-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bertino, Pal, Adelberg and Arora because using the steps of "XML fields of the unstructured data are filled with transaction data intercepted from a database transaction prior to committing the transaction based on a predefined mapping to multiple data sources" would have given those skilled in the art the tools to improve the invention by using XML as a means of simplifying the transferring and validating data and content. This gives the user the advantage of being able to share data across a myriad of different platforms.

As per claim 7,

Nether Bertino, Pal nor Adelberg explicitly indicate "the multiple data sources comprise multiple tables of a database".

However, Arora discloses "the multiple data sources comprise multiple tables of a database" (column 9, lines 26-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bertino, Pal, Adelberg and Arora because using the

steps of "the multiple data sources comprise multiple tables of a database" would have

given those skilled in the art the tools to improve the invention by using XML as a

means of simplifying the transferring and validating data and content. This gives the

user the advantage of being able to share data across a myriad of different platforms.

    As per claims 15 and 20,

    These claims are respectfully rejected on grounds corresponding to the

arguments given above for rejected claim 6 and are similarly rejected.

5.   Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bertino et al. ('Bertino' hereinafter) ("Integrating XML and Databases", IEEE Internet

Computing, July-August 2001, pages 84-88) in view of Pal et al. ('Pal' hereinafter)

(Publication Number 2005/0091188) and further in view of Arora et al. ('Arora'

hereinafter) (Patent Number 7,346,598) and further in view of Adelberg (B. Adelberg,

"NoDoSE--a tool for semi-automatically extracting semistructured data from text

documents", in: Proceedings of 1998 ACM SIGMOD International Conference on

Management of Data, Seattle, Washington, USA, 1998, pp. 283-294).

    As per claim 9, Bertino teaches

A method of searching XML data stored in a column of a database table in character large object (CLOB) format, the method comprising: (see page 84, first column, paragraphs 1-2)

storing the XML data in the column of the database table in CLOB format, wherein the XML data comprises a first plurality of XML elements that conform to a first data type definition (DTD); (document stored in database in Clob, page 86, first column, third paragraph)

XML elements in the first and second plurality of XML elements; and obtaining information from the unstructured data stored in CLOB format for the corresponding XML element. (query unstructured documents, page 86, second column, second paragraph)

Bertino does not explicitly indicate "generating a plurality of database tables representing an intermediate index between each query element and at least one of the one or more elements in the first" "plurality of XML elements identified as query elements in the unstructured data stored in CLOB format; generating one or more queries on the unstructured data stored in CLOB format using the query elements; translating a query element associated with a query on the unstructured data based on the plurality of tables to a corresponding element in the unstructured data stored in CLOB format".

However, Pal discloses "generating a plurality of database tables representing an intermediate index between each query element and at least one of the one or more elements in the first" "plurality of XML elements identified as query elements in the

unstructured data stored in CLOB format;" (create secondary XML indexes, paragraph

[0048], lines 1-4; paragraph [0050], lines 1-6) "generating one or more queries on the

unstructured data stored in CLOB format using the query elements; translating a query

element associated with a query on the unstructured data based on the plurality of

tables to a corresponding element in the unstructured data stored in CLOB format"

(queries using secondary index path, paragraph [0051], lines 3-10).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bertino and Pal because using the steps of "generating

a plurality of database tables representing an intermediate index between each query

element and at least one of the one or more elements in the first" "plurality of XML

elements identified as query elements in the unstructured data stored in CLOB format;

generating one or more queries on the unstructured data stored in CLOB format using

the query elements; translating a query element associated with a query on the

unstructured data based on the plurality of tables to a corresponding element in the

unstructured data stored in CLOB format" would have given those skilled in the art the

tools to improve the invention by allowing fast and efficient searching of large objects in

XML coded information. This gives the user the advantage of more efficient use of

limited resources.

Nether Bertino nor Pal explicitly indicate "and a second plurality of XML elements

that conform to a second DTD", "and second plurality of XML elements".

However, <u>Arora</u> discloses "and a second plurality of XML elements that conform to a second DTD", "and second plurality of XML elements" (XML database schemas from multiple data providers, column 7, lines 22-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine <u>Bertino</u>, <u>Pal</u> and <u>Arora</u> because using the steps of "and a second plurality of XML elements that conform to a second DTD", "and second plurality of XML elements" would have given those skilled in the art the tools to improve the invention by using XML as a means of simplifying the transferring and validating data and content. This gives the user the advantage of being able to share data across a myriad of different platforms.

Neither <u>Bertino</u>, <u>Pal</u> nor <u>Arora</u> generating a first graphical user interface and displaying the first graphical user interface on a display device, the first graphical user interface configured to enable users to designate elements as query elements; receive user input via the first graphical user interface identifying one or more elements in the data.

However, <u>Adelberg</u> discloses generating a first graphical user interface and displaying the first graphical user interface on a display device, the first graphical user interface configured to enable users to designate elements as query elements (gui which allows the user to hierarchically decompose the document, page 5, section 202, first paragraph); receive user input via the first graphical user interface identifying one or more elements in the data (decompose document using gui, page 5, section 202, first paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bertino, Pal, Arora and Adelberg because using the steps of generating a first graphical user interface and displaying the first graphical user interface on a display device, the first graphical user interface configured to enable users to designate elements as query elements and receive user input via the first graphical user interface identifying one or more elements in the data would have given those skilled in the art the tools to improve the invention by bringing new data such as mail, code, documentation and other text within the reach of general query tools. This gives the user the advantage of being able to perform searches and indexing on data items which are not normally searchable.

As per claim 10,

Nether Bertino nor Pal explicitly indicate "the first and second DTDs include first and second XML elements, respectively, that share a common name but represent different types of data; and wherein translating a query element associated with a query on the unstructured data based on the plurality of tables to a corresponding element in the unstructured data stored in CLOB format comprises translating a first query element that represents the first XML element and not the second XML element and a second query element that represents the second XML element and not the first XML element".

However, Arora discloses "the first and second DTDs include first and second XML elements, respectively, that share a common name but represent different types of data; and wherein translating a query element associated with a query on the

unstructured data based on the plurality of tables to a corresponding element in the

unstructured data stored in CLOB format comprises translating a first query element

that represents the first XML element and not the second XML element and a second

query element that represents the second XML element and not the first XML element"

(column 8, lines 42-58; column 9, lines 19-31).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bertino, Pal and Arora because using the steps of "the

first and second DTDs include first and second XML elements, respectively, that share

a common name but represent different types of data; and wherein translating a query

element associated with a query on the unstructured data based on the plurality of

tables to a corresponding element in the unstructured data stored in CLOB format

comprises translating a first query element that represents the first XML element and

not the second XML element and a second query element that represents the second

XML element and not the first XML element" would have given those skilled in the art

the tools to improve the invention by using XML as a means of simplifying the

transferring and validating data and content. This gives the user the advantage of being

able to share data across a myriad of different platforms.

6.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertino et

al. ('Bertino' hereinafter) ("Integrating XML and Databases", IEEE Internet Computing,

July-August 2001, pages 84-88) in view of Pal et al. ('Pal' hereinafter) (Publication

Number 2005/0091188) and further in view of Adelberg (B. Adelberg, "NoDoSE--a tool

for semi-automatically extracting semistructured data from text documents", in:

Proceedings of 1998 ACM SIGMOD International Conference on Management of Data,

Seattle, Washington, USA, 1998, pp. 283-294) and further in view of Campbell et al.

('Campbell' hereinafter) (Patent Number 6,856,970).

As per claim 8, Bertino teaches

the unstructured data (page 86, first column, second paragraph)

Nether Bertino, Pal nor Adelberg explicitly indicate "is part of an electronic record

stored in a common repository of electronic records that provides an audit trail that

cannot be altered or disabled by users of the system".

However, Campbell discloses "is part of an electronic record stored in a common

repository of electronic records that provides an audit trail that cannot be altered or

disabled by users of the system" (column 24, lines 57-65).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bertino, Pal, Adelberg and Campbell because using the

steps of "is part of an electronic record stored in a common repository of electronic

records that provides an audit trail that cannot be altered or disabled by users of the

system" would have given those skilled in the art the tools to improve the invention by

ensuring that the data can be rebuilt from any point in time by tracking changes. This

gives the user the advantage of being ensured that the data cannot be changed by

mistake and not be recovered.

Response to Arguments

7.   Applicant's arguments filed 11/21/2008 have been fully considered but they are

not persuasive.

        Applicant argues that neither <u>Bertino</u> nor <u>Pal</u> disclose the feature of receiving

user input identifying one or more elements in the unstructured data stored in CLOB

format as query elements. Respectfully, it is noted that the <u>Bertino</u> discloses the

unstructured data and CLOB format (page 86, first column third paragraph), which are

taught as unstructured representations and a document stored in CLOB data type.

Therefore <u>Berino</u> discloses these limitation. With respect to the user input identifying

one or more elements as query elements and the new added amendments to the

claims, these limitations are taught by the newly added <u>Adelberg</u> reference as shown in

the rejections above, and therefore it is respectfully submitted that the remaining

arguments are moot in view of the newly added reference.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

The prior art made of record, listed on form PTO-892, and not relied upon is

considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-

7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Tim T. Vo/
Supervisory Patent Examiner, Art Unit 2168

Jay Morrison   Tim Vo
TC2100   TC2100